# **UNIVERSITY OF LOUISIANA AT LAFAYETTE**

Lafayette, Louisiana

Bid No. - File 12035

### PROPOSAL FOR FURNISHING

# Cooling Tower

Proposals will be received up to <u>August 30, 2012 2:00PM</u> by the Purchasing Office, University of Louisiana at Lafayette, Lafayette, Louisiana. Proposals will not be received after this specified hour and date. At this time, the proposals will be publicly opened and read in the Purchasing Office, Room 123, Martin Hall, 104 University Circle, on the University Campus, Lafayette, Louisiana.

This is a *Competitive Sealed Bid*. Complete details governing the policies and procedures to be followed in responding to the request are contained in the attachment.

Bid must be received by the due date and time in the Purchasing Office at the University of Louisiana at Lafayette, 104 University Circle, Martin Hall, Room 123, Lafayette, LA, 70503. Bid is to be in a <u>SEALED ENVELOPE</u> with the <u>BID NUMBER and DUE DATE ON THE OUTSIDE OF THE ENVELOPE</u>.

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## To Whom It May Concern:

Lafayette LA 70504 0197

Attached is the completed proposal of the firm listed below. The undersigned certifies that he/she (or they) has/have carefully examined the Instructions to Bidders, the General Conditions, and the Specifications hereto attached and made part herein, and agrees to comply with the instructions, conditions, and specifications, as covered by the attached papers. On the basis of the specifications, the undersigned proposes to furnish any or all items listed in the schedule of items hereto attached, upon which prices are requested, and at the price stated for each item.

Firm Name	Signature (By signing this bid, bidder certifies compliance with L.R.S.39:1594, Act 121 of 1997, see No. 9 on Instructions to Bidder's sheet.)
Address	Name (Printed)
City, State, Zip Code	Title
Telephone No. including area code	Date

Fax No. including area code

# INSTRUCTIONS TO BIDDERS AND GENERAL CONDITIONS

1. <u>SUBMITTAL OF PROPOSALS:</u> The bidder must submit his/her proposal on the form herein provided. The proposal must be signed in ink with each page initialed in space(s) provided, with the blank space(s), filled in for each and every item. The bidder must state the UNIT price (written in ink or typewritten) for which he/she proposes to furnish each item and shall show the total amount for each item based on the quantities shown. E-mail, telephone and telegraphic quotations <u>WILL NOT</u> be accepted.

Each change or correction must be clearly marked and initialed by bidder. Failure to comply with these requirements may cause your bid to be disqualified.

The proposal shall be submitted in a sealed envelope with the File No. and Due Date on the outside of the envelope. In the event bid contains bulky subject material, the File No. and Due Date shall be on the outside of the envelope/package. This envelope shall then be sealed and delivered to the Purchasing Office, University of Louisiana at Lafayette, Lafayette, Louisiana, before the time set for receiving proposals as entered on the front sheet hereof. Any envelope, any sample or package, etc. should refer to the File No. and Due Date.

Proposal received after the time set will be returned to the bidder unopened.

Proposal may be rejected for additions, conditions, or alternate bids, not called for, for incomplete bids, or for failure to comply with requirements set forth.

No bids may be withdrawn after opening date and hour shown on cover sheet and quoted prices shall be firm for a minimum of thirty (30) days unless otherwise specified by the University or the bidder.

2. <u>SPECIFICATIONS:</u> Wherever standard Louisiana specifications are specified in any quotation, all bidders must comply with these specifications. Specifications other than standard specifications are to be considered as setting a standard of quality suitable to permit competition and to coincide as far as possible with commercial standards of goods generally sold on the market.

Bidder must specify the brand and model number of the product offered in his/her bid. Bids not specifying brand and model number shall be considered as offering the exact product specified.

Bidder proposing an equivalent brand or model should submit with the bid information (such as illustrations, descriptive literature, technical data) sufficient for the University to evaluate quality, suitability, and compliance with the specifications of the bid. Failure to submit such information may cause bid to be rejected.

- 3. <u>TAXES:</u> The University of Louisiana at Lafayette is exempt from Louisiana State Sales and Use Tax by Act 1029, 1991; and from Lafayette City and Parish Sales Tax by Exemption Number 281-0390-00447.
- 4. <u>BID OPENING:</u> Bidders may attend the bid opening, but no information or opinions concerning the ultimate contract award will be given at the bid opening or during the evaluation process. Bids may be examined seventy-two (72) hours after request is made. Information pertaining to completed files may be secured by visit the University Purchasing Office during normal working hours.

A complete record of all bids is kept on file in this office subject to the inspection of any citizen. Every courtesy will be afforded any citizen who is interested in investigating, for any purpose, the record(s) of University of Louisiana at Lafayette purchases.

#### Page 2, Instructions to Bidders and General Conditions

5. <u>AWARD OF CONTRACT:</u> The award of all contracts will be made in conformity with the requirements of the State Statute (Chapter 17, Title 39, R.S. 1551). The contract shall be awarded with reasonable promptness by written notice to the lowest responsive and responsible bidder whose bid meets the requirements and criteria set forth in the proposals.

The University of Louisiana at Lafayette reserves the right to reject any and all bids.

The University assumes the right to increase, reduce, or completely eliminate entire item or items from the quotation after an analysis of the bids. The University also reserves the right to award this proposal on an individual item basis, a combination of items basis, or as a total package to one (1) vendor, whichever is in the best interest of the University.

6. <u>TERMS:</u> Unless otherwise specified by the University in the proposal, bid prices must be complete, including transportation, prepaid by bidder to destination. Bids other than FOB destination may be rejected.

Not withstanding bid response, terms of payment shall be at least "Net 30 Days". Discounts offered for payment in less than thirty (30) days WILL NOT be considered in making an award. On open-ended requirement contracts, discounts will be accepted, but WILL NOT be considered in making an award. Bids containing "payment in advance" or "COD" requirements may be rejected.

- 7. <u>EQUAL EMPLOYMENT:</u> The University is an equal opportunity employer and looks to its contractors, subcontractors, vendors and suppliers to make affirmative action to effect this commitment in its operations.
- 8. <u>CANCELLATION OF CONTRACT</u>: The University has the right to cancel any contract, in accordance with Purchasing Rules and Regulations, for cause, including but not limited to the following: (1) Failure to deliver within the time specified in the contract; (2) Failure of the product or service to meet specifications, conform to sample quality or to be delivered in good condition; (3) Misrepresentation by the Contractor; (4) Fraud, collusion, conspiracy or other unlawful means of obtaining any contract with the state; (5) Conflict of contract provisions with constitutional or statutory provisions of state or federal law; (6) Any other breach of contract.
- 9. SIGNATURE AUTHORITY: In accordance with L.R.S.39:1594 (Act 121 of 1997), the person signing the bid must be:
- A. A current corporate officer, partnership member or other individual specifically authorized to submit a bid as reflected in the appropriate records on file with the Secretary of State; or
- B. An individual authorized to bind the vendor as reflected by an accompanying corporate resolution, certificate or affidavit. By signing the bid, the bidder certifies compliance with the above.

ITEM			UNIT	
NO.	QTY/UNIT	DESCRIPTION	PRICE	<b>AMOUNT</b>

1. 1 only Cooling Tower, Specifications as follows....

<u>COOLING TOWER</u>: Provide an induced-draft, cross-flow type, factory-assembled, film-filled, industrial-duty, galvanized steel cooling tower. The limiting overall dimensions of the tower shall be 8'6" long, 14'6" wide and 10'6" high. Tower shall be similar and equal in all respects to Marley Model NC8402.

<u>Thermal Performance</u>: The tower shall be capable of cooling 400 gpm of water from 100 °F to 86 °F at a design entering air wet-bulb temperature of 80 °F, with a maximum 5 horsepower fan motor.

<u>Performance Warranty</u>: The cooling tower manufacturer shall guarantee that the tower supplied will meet the specified performance conditions when the tower is installed according to plan.

<u>Design Loading</u>: The tower and all its components shall be designed to withstand a wind load of 30 psf, as well as a .3g seismic load. It shall be designed to withstand shipping and hoisting loads of 2g horizontal and 3g vertical. The fan deck and hot water basin covers shall be designed for 50 psf live load or a 200 lb. concentrated load. Handrails, where specified, shall be capable of withstanding a 200 lb. concentrated live load in any direction, and shall be designed in accordance with OSHA guidelines.

<u>Construction</u>: Except where otherwise specified, all components of the cooling tower shall be fabricated of heavy-gauge steel, protected against corrosion by G-235 galvanizing. The tower shall be capable of withstanding water having a pH of 6.5 to 8.0; a chloride content (NaCl) up to 500 ppm; a sulfate content (SO4) up to 250 ppm; a calcium content (CaCO3) up to 500 ppm; silica (SiO2) up to 150 ppm; and design hot water temperatures up to 125°F. The circulating water shall contain no oil, grease, fatty acids, or organic solvents.

The specifications, as written, are intended to indicate those materials that will be capable of withstanding the above water quality in continuing service, as well as the described loads. They are to be regarded as minimum requirements. Where component materials peculiar to individual tower designs are not specified, the manufacturers shall take the above water quality and load carrying capabilities into account in the selection of their materials of manufacture.

<u>Mechanical Equipment</u>: Fans shall be propeller-type, incorporating aluminum alloy blades and aluminum hubs. Blades shall be individually adjustable. Fans shall be driven through a right angle, industrial duty, oil lubricated, geared speed reducer that requires no oil changes for the first five (5) years of operation. Speed reducers employing pulleys and belts will not be accepted.

Motors shall be TEFC, 1.15 service factor, variable torque, and specially insulated for cooling tower duty. Motor shall operate in the shaft-horizontal position, and nameplate horsepower shall not be exceeded at design operation.

A neoprene and galvanized steel oil line shall extend from the gear reducers to a point on the fan deck of each cell. The oil level in the gear reducer shall be readable at that point by means of a dip stick.

The complete mechanical equipment assembly for each cell shall be supported by a rigid, welded, hot dipped galvanized steel structural support that resists misalignment between the motor and the gear reducer. The mechanical equipment assembly shall be warranted against any failure caused by defects in materials and workmanship for no less than one (1) year following the date of tower startup. This warranty shall cover the fan, fan motor, speed reducer, drive shaft and couplings, and the mechanical equipment support.

ITEM UNIT
NO. QTY/UNIT DESCRIPTION PRICE AMOUNT

### 1. - Continued

A vibration limit switch shall be installed on the mechanical equipment support assembly and wired into the control panel. The purpose of this switch will be to interrupt power to the motor in the event of excessive vibration. It shall be adjustable for sensitivity, and shall require manual reset.

<u>Fill, Louvers and Drift Eliminators</u>: Fill shall be film type, thermoformed of 15 mil thick PVC, with louvers formed as part of each fill sheet. Fill shall be suspended from hot dip galvanized structural tubing supported from the tower structure, and shall be elevated above the floor of the cold water basin to facilitate cleaning. Air inlet faces of the tower shall be free of water splash-out.

Drift eliminators shall be PVC, triple-pass, and shall limit drift losses to no more than 0.005% of the design GPM flow rate.

<u>Hot Water Distribution System</u>: Two open basins (one above each bank of fill) shall receive hot water piped to each cell of the tower. These basins shall be installed and sealed at the factory, and shall be equipped with removable, galvanized steel covers capable of withstanding the loads described previously.

Each cell of the tower shall include a single hot water inlet connection located as shown on the plans. An internal PVC system of piping shall deliver water equally to the distribution basins without the need for balancing valves. The internal piping shall run from the bottom of the cold water basin to the distribution basins. This internal piping system shall require no scheduled maintenance, and shall be located such that it does not interfere with normal maintenance access. Removable, interchangeable polypropylene nozzles installed in the floor of these basins shall provide full coverage of the fill by gravity flow.

<u>Casing</u>, <u>Fan Deck</u>, <u>& Fan Cylinder</u>: The casing and fan deck shall be heavy-gauge galvanized steel, and shall be capable of withstanding the loads described previously. The top of the fan cylinder shall be equipped with a conical, non-sagging, removable fan guard, fabricated of welded 5/16" and 7 gauge rods, and hot dip galvanized after fabrication. Fan cylinders 5'-0" in height and over shall not be required to have a fan guard.

<u>Access</u>: A large galvanized steel access door 30" wide and a minimum of 33" high shall be located on both end walls for entry into the cold water basin and fan plenum area. Access doors shall be operable from inside as well as outside the tower.

The top of the tower shall be equipped with a sturdy handrail, complete with knee rail and toe board, designed according to OSHA guidelines. Handrails and knee rails shall consist of 1.66" O.D. x 15 gauge galvanized structural tubing, the handrail of which shall be capable of withstanding a 200 pound concentrated live load in any direction. Posts are 2" x 2" square structural tubing and shall be spaced on centers of 8'-0" or less. A 1'-6" wide aluminum ladder with 3" I-beam side rails and 1.25" diameter rungs shall be permanently attached to the end wall casing of the tower, rising from the base of the tower to the top of the handrail.

Provide a ladder extension for connection to the foot of the ladder attached to the tower casing. This extension shall be long enough to rise from the ground level to the base of the tower. The installing contractor shall be responsible for cutting the ladder to length; attaching it to the foot of the tower ladder; and anchoring it at its base.

A heavy gauge galvanized steel safety cage shall surround the ladder, extending from a point approximately 7'-0" above the foot of the ladder to the top of the handrail surrounding the fan deck.

ITEM UNIT NO. QTY/UNIT DESCRIPTION PRICE AMOUNT

### 1. - Continued

<u>Cold Water Collection Basin</u>: The cold water basin shall be heavy-gauge galvanized steel, and shall include side outlet sump connections. Suction connections shall be equipped with galvanized debris screens. A factory installed, float operated, mechanical make-up valve shall be included. A 4" diameter PVC pipe overflow shall be provided in each cell of the tower. The basin shall include a depressed center section into which accumulated silt can be flushed and overflow standpipes shall be removable to permit flush-out cleaning of the basin. The basin floor adjacent to the depressed section shall slope toward the depressed section to prevent build-up of silt under the fill area.

<u>Variable Frequency Drive and Cooling Tower Controls</u>: Cooling tower shall be provided with factory installed variable frequency drive and self-contained control module/panel to allow tower to operate independent of any other equipment. VFD and/or control module will only receive a start/stop signal from an outside source. Control module shall adjust fan speed through VFD to maintain desired water temperature set point.

<u>Start-up</u>: Cooling tower start-up shall be completed by factory authorized start-up technician. Warranty period will begin at the date of start-up.

<u>"Buy America" Compliance</u>: Equipment shall be manufactured in compliance with section 1605 of ARRA-09 requirements with regards of determining whether substantial transformation has occurred in the U.S.A.

<u>NOTE</u>: Vendor shall provide a Manufacture's Certificate of Compliance as per the American Recovery Act. Compliance per Section 1605 of aara-09.

<u>Delivery Timetable</u>: Provide bid for standard delivery schedule with additional/alternate bid for expedited 4 week delivery schedule.

Installation not included in specifications. Shipping to be included in price.

MFG NO	 _
Eight (8) Week Delivery Time:	\$ (In Figures)
Four (4) Week Delivery Time:	\$ (In Figures)

	& Labor
TERMS	FOB <u>UL Lafayette/CROWLEY, LA</u>
BIDDER ACKNOWL	EDGES RECEIPT OF THE FOLLOWING ADDENDA:
	DATED DATED
	FIRM NAME
	SIGNED BY (signature)
	SIGNED BY (printed)
	TITLE
	ADDRESS
	TELEPHONE NO
	FAX NO.
	DATE